

Remarks

1. Summary of Office Action

In the Office Action mailed February 5, 2008, the Examiner rejected claims 1-18 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Application Pub. No. 2004/0076177 (hereinafter "Koch").

2. Status of Claims

Applicants have cancelled claims 7, 13, and 16, and further amended claims 1-3, 8, 11, 12, 15, 17, and 18 to recite the invention more particularly and/or make minor corrections.

Presently pending in this application are claims 1-6, 8-12, 14, 15, 17, and 18, of which claims 1 and 12 are independent and the remainder are dependent.

3. Response to §102 Claim Rejections

As noted above, the Examiner rejected claims 1-18 as being anticipated by Koch (note claims 7, 13, and 16 have been cancelled). Under M.P.E.P. § 2131, a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Applicants respectfully traverse the rejections of presently pending claims 1-6, 8-12, 14, 15, 17, and 18, because Koch does not disclose or suggest each and every element as recited in any of these claims.

The invention of independent claim 1 (as amended above) is directed to a client device comprising: (i) a network access device having at least a powered state and a power-off state, the powered state allowing the network access device to receive messages over a communication channel, the power-off state not allowing the network

access device to receive messages over the communication channel, *the network access device determines whether wireless coverage exists for the network access device and provides an indication of an out-of-coverage condition if the network access device is out of wireless coverage*, and (ii) a controller that determines time periods for the network access device to be in the powered state, the time periods based on a discontinuous reception parameter obtained from the network access device, *the controller also receiving the indication of the out-of-coverage condition and switching the network access device to the power-off state if there is the out-of-coverage condition for the network access device, wherein upon receipt of the indication of the out-of-coverage condition, the controller waits a predetermined amount of time to determine if the network access device goes back into wireless coverage before switching the network access device to the power-off state.* (Emphasis added). (Claims 2-6 and 8-11 each depend from claim 1 and thus necessarily include all of the limitations of claim 1).

Similarly, the invention of independent claim 12 (as amended above) is directed to a method in a client device, the client device having a network access device and a controller, the method comprising the steps of: (i) obtaining a discontinuous reception parameter from a network, (ii) determining time periods for operating the network access device in a powered state based on the obtained discontinuous reception parameter, (iii) operating the network access device in a powered state during the time period, (iv) *establishing whether wireless coverage exists for the network access device, including providing an indication of an out-of-coverage condition to the controller if the network access device is out of wireless coverage*, and (v) *the controller switching the network access device to the power-off state if there is the out-of-coverage condition for the*

network access device, wherein upon receipt of the indication of the out-of-coverage condition, the controller further waiting a predetermined amount of time to determine if the network access device goes back into wireless coverage before switching the network access device to the power-off state. (Emphasis added). (Claims 14, 15, 17, and 18 each depend from claim 12 and thus necessarily include all of the limitations of claim 12).

Applicants respectfully submit that Koch fails to disclose or suggest the claimed invention, as recited in at least independent claims 1 and 12.

For instance, Koch fails to disclose or suggest the claimed limitations, in a client device, of: “establishing whether wireless coverage exists for the network access device, including providing an indication of an out-of-coverage condition to the controller if the network access device is out of wireless coverage; and the controller switching the network access device to the power-off state if there is the out-of-coverage condition for the network access device, wherein upon receipt of the indication of the out-of-coverage condition, the controller further waiting a predetermined amount of time to determine if the network access device goes back into wireless coverage before switching the network access device to the power-off state”, as now recited in various ways in each of the independent claims.

At best, Koch discloses a system and method for controlling power states of wireless radios in a mobile device. According to the method of Koch, one or more of the device’s wireless radios can be selectively powered on and off by a user. In this regard, Koch provides a user interface (e.g., a connectivity dialog, as shown in Figures 2 and 3 for instance) that shows a power state of a given wireless radio and gives a user an option to power on or off selected (or all) radio(s).

To illustrate, a user can actuate “Turn wireless off” link on the user interface to collectively power down (e.g., automatically via a power manager in the device) each of the wireless radios that is on. Similarly, a user can actuate “Turn wireless on” link to collectively power on all of the wireless radios that are off. In other examples, a user can instead control a power state of each wireless radio individually, e.g., for battery saving purposes. (*See, e.g.*, Koch, “Summary of the Invention” section and paragraphs 0027-0049).

Applicants, however, do not find in Koch any teaching or suggestion for a client device having a network access device and a controller, whose operation involves: (i) establishing (e.g., by the network access device) whether wireless coverage exists for the network access device, including providing an indication of an out-of-coverage condition to the controller if the network access device is out of wireless coverage, and (ii) the controller switching the network access device to the power-off state if there is the out-of-coverage condition for the network access device, wherein upon receipt of the indication of the out-of-coverage condition, the controller further waiting a predetermined amount of time to determine if the network access device goes back into wireless coverage before switching the network access device to the power-off state, as presently recited in one way or another in the claims.

At best, Koch provides a way for a user to selectively turn on or off a wireless connection by powering up or powering down a wireless radio in a device. For instance, as disclosed by Koch, a wireless connection may exist due to one of the wireless radios being on, and a user can choose to turn off the wireless connection by turning the radio off. (*See, e.g.*, paragraphs 0053-0056).

One skilled in art, however, would readily recognize that Koch does not disclose or suggest controlling a power state of a network access device in the manner claimed by Applicants. Indeed, Koch does *not even* consider determining whether a mobile device is in or out of wireless coverage.

By way of example, Applicants' specification illustrates how the claimed invention could be carried out in a client device. (*See, e.g.*, page 23, line 12, to page 25, line 20). In one embodiment, a network access device (or a transceiver therein) may determine that the network access device is out of wireless coverage. This may occur if the client device resides in an area of very poor or no wireless coverage. In this case, it may not be desirable to keep the device powered up for an entire time period (based on a discontinuous reception parameter) and drain a battery when the client device could not receive wireless communications. Accordingly, the network access device could provide an indication of an out-of-coverage condition to a controller that could then switch the network access device into a power-off state.

Further, it may not be beneficial for the controller to power off the network access device if there is just a temporary, intermittent lack of wireless coverage. For example, this could be due to momentary interfering signals, poor network coverage, momentary network outages, and/or momentary interference from obstacles. Advantageously, the controller could wait a programmable amount of time to see if the network access device goes back into wireless coverage before switching the network access device to the power-off state.

Applicants respectfully submit that Koch fails to provide any teaching or suggestion for Applicants' claimed invention, as now recited in the claims and illustrated by way of example above.

Because Koch does not teach or suggest the invention as recited in any of claims 1-6, 8-12, 14, 15, 17, and 18, Koch fails to anticipate these claims under 35 U.S.C. § 102.

4. Conclusion

In view of the foregoing, Applicants submit that claims 1-6, 8-12, 14, 15, 17, and 18 are in condition for allowance. Therefore, Applicants respectfully request favorable reconsideration and allowance of those claims.

Respectfully submitted,

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